

**English**

**SPELEO STRETCHER**  
**BY ALP DESIGN**

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DESIGN 

# SPELEO STRETCHER BY ALP DESIGN

## ACCOMMODATION AND SLINGING OF THE VICTIM

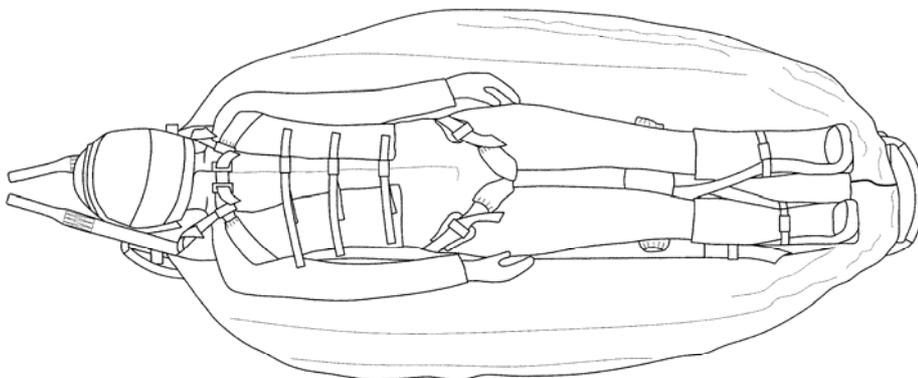
This Stretcher allows the best accommodation and fastening of the victim. Furthermore, it meets the principles of horizontal rescue, as well as physiological and non-traumatic recovery of the victim.

The victim is fastened in three different areas: legs through independent tapes under the heel, with anti-slip fastening system on the foot; pelvis with stuffed seat-structure; this system has been conceived and tested to ensure a good fastening even in case of pelvis bone fracture, in order to allow easy access to femoral arteries and eliminate compressions in case the victim has to stay on the stretcher for a long time; thorax with girdle fastening system and stuffing under the armpits; this system ensures better fastening in case of spinal trauma, and allows the vertical rescue of the victim with pelvis bone fracture; the absence of belts prevents from compressing the sub-axillary area. In order to improve the victim's stay on a stiff board for a long time, some mobile stuffings are provided for the cervical, lumbar and popliteal area.

The head is protected through a helmet with sturdy and wide visor, and it is connected with a special hood.

Then, the whole structure is covered with two wings of nylon fabric – insulated and waterproof -, joint by means of pull-up tape (Velcro) and several belts.

The wide opening and stiff flat board allow positioning some medical-surgical devices between the victim's legs, such as artery blood pressure monitor, bag perfusion system, heater, urine collection bag, electronic temperature reader, anti-shock trousers, oxygen breathing set with 3-litre bottle.



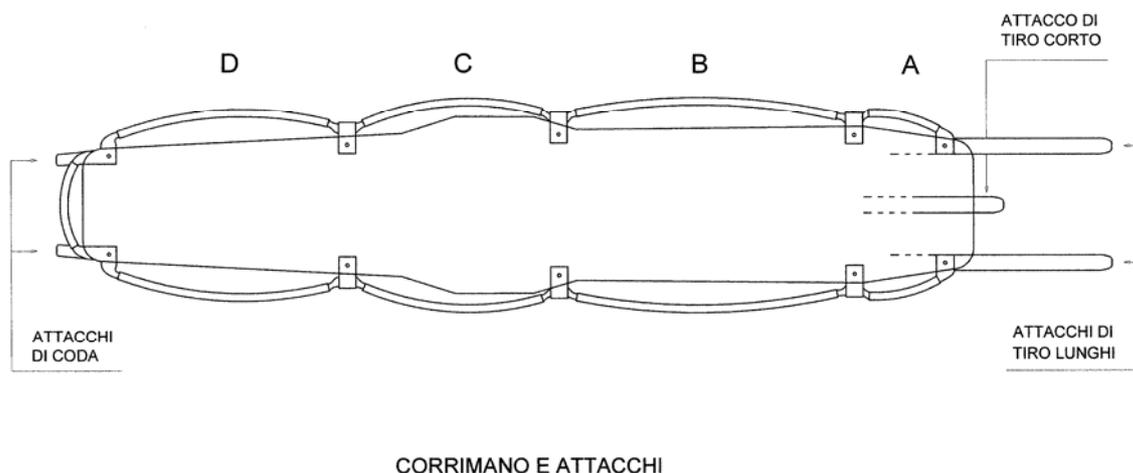
ALLOGGIO E IMBRAGAGGIO DEL FERITO

# HANDLING

This stretcher can be lifted and handled in any way. The selection of the type of handling depends on the ground the rescuers have to deal with, and, most of all, the victim's conditions.

## HAND TRANSPORTATION

The stretcher is equipped with some handrails all around.



### Transportation in a tunnel

In general, we suggest that four rescuers can handle the stretcher: two for the handrails "D" and two for the handrails "B" (NOTE: if handrails "B" cannot be used because of possible pressure on the victim's hips or arms, use handrails "A").

In difficult areas, three rescuers can be enough: two for the handrails "A" and one for the bottom handrail.

### Hand transportation on a slope

In this case, the instructions above are also valid. Just remember to add a pulling rope to facilitate the rescuers. This rope shall be tied on to the short pulling eyebolt, so that the long pulling eyebolts remain available for the other rescuers and can be used as handles.

### Hand transportation in narrow passage or between two rock walls

We cannot provide any special instruction in case of narrow passage, as every case is different. Anyway, remember that this stretcher can easily slide on the most uneven ground. Therefore, a pulling rope, if well fastened, and a rescuer at the bottom handrail can succeed also in very difficult situations.

**CAUTION: LEAVE THE STRETCHER IN A SAFE POSITION AND ALWAYS FASTENED; THE STRETCHER CAN EASILY SLIDE AND, FOR THIS REASON, IT CAN BECOME HAZARDOUS IN CASE THE RESCUERS ARE NOT CAUTIOUS.**

## TRANSPORTATION BY MEANS OF THE ROPE

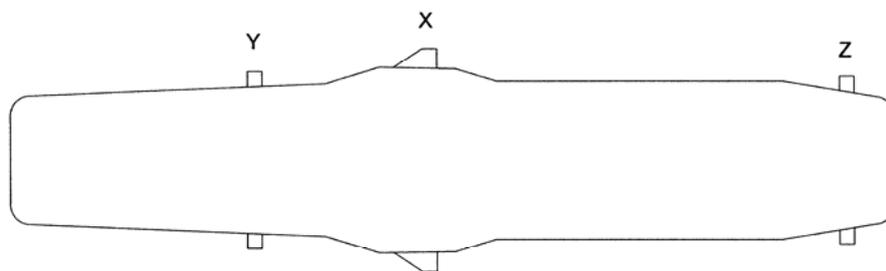
In order to lift the stretcher in vertical, the rescuers can use the vertical or variable-position horizontal mode. The following is the simplest mode.

### Rescue with vertical stretcher

In this case, use the long pulling eyebolts for the pulling rope and the short pulling eyebolt for the safety rope, or vice versa – this will not affect the safety, is just the rescuers' choice according to the type of place in which they have to work. It is acknowledged that this type of rescue (vertical) is the most practical and quick, but, on the other side, sometimes can be very dangerous for the victim.

### Rescue with horizontal stretcher

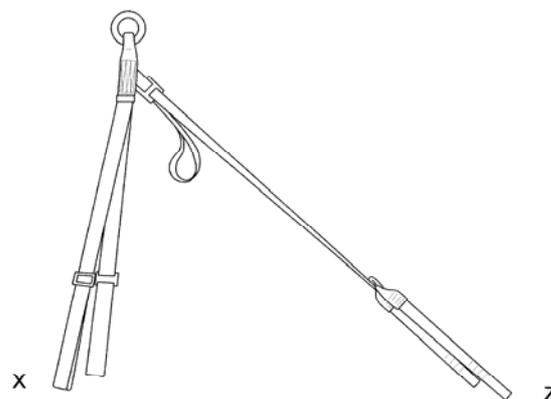
This stretcher is equipped with two types of supporting belts and special fastening points:



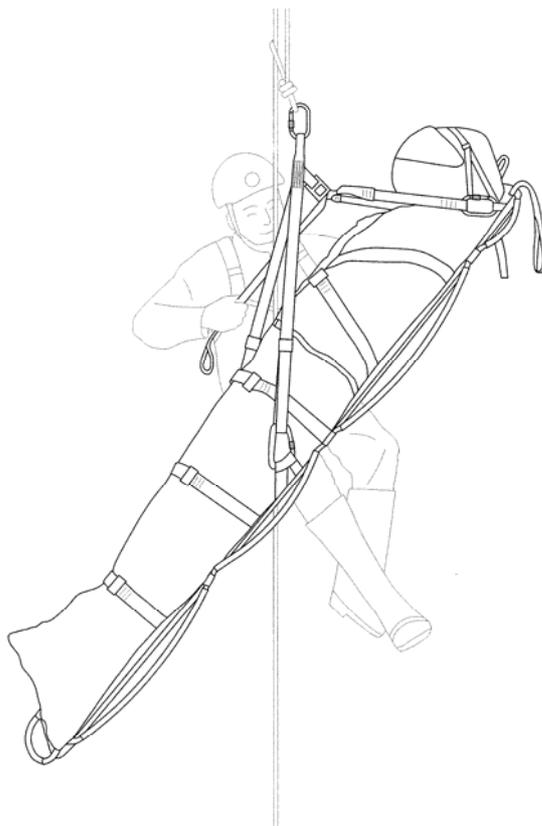
ATTACCHI DI SOSPENSIONE PERIMETRALI

### Rescue from a well with TRIMM

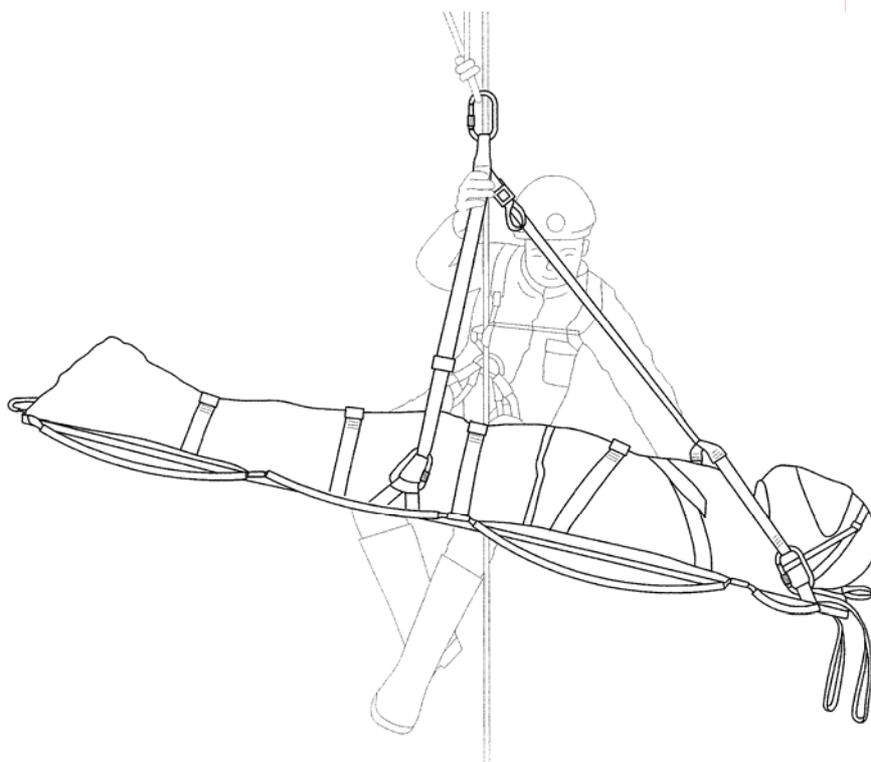
Tie the pulling rope on to the TRIMM pulling point. For better safety, the safety rope can be tied on to the same pulling point, then joint to a front pulling point. When the stretcher starts rising, the rescuer shall adjust the stretcher inclination through the special belt. In case the well becomes narrower, so that the horizontal rescue is not possible, the rescuer can adjust the belt in order to put the stretcher vertical, as much as he deems necessary. This operation does not require any special strength! Once the well becomes wider, the stretcher can be put horizontal again, or even 'antideclive' (this can be useful in case of unexpected low blood pressure), by pressing the inclination adjusting lever of the buckle.



CINGHIAGGIO PER RECUPERO ORIZZONTALE CON  
POSSIBILITA' DI VERTICALIZZAZIONE - "TRIMM"



VERTICALIZZAZIONE

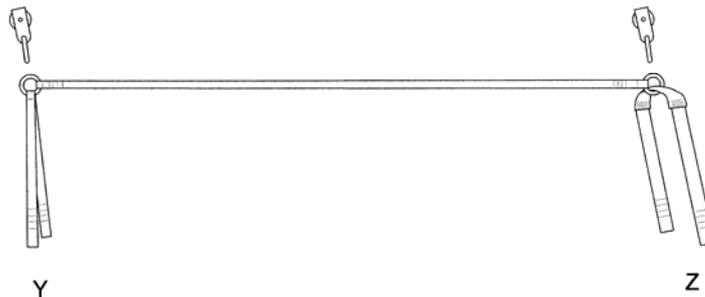


POSIZIONE ANTIDECLIVE

## Transportation through cable-ways

Once the TELEFERICA (cable-ways) belts have been tied on to the stretcher, insert the pulleys and the related supporting rope in the two metal rings.

Please note that the pulling rope has to be tied on to the short pulling point and, at the same time, to the front ring of the cable-ways belts: the two connections shall work at the same time, in order to prevent the victim from oscillating during the handling. The addition of a “tail” safety rope can make the stretcher more stable: tie it on to “Y” points or tail points, making a triangle of rope instead of using the bottom handrail.



CINGHIAGGIO PER TELEFERICA

## TRANSPORTATION IN MEANDER

The stretcher can be handled ‘on the side’, as a knife blade. In this case, two rescuers shall tie their slinging devices on to “Y” and “Z” points of one side. Inside the meander, they shall move in opposition. This operation requires that the rescuers are very skilled and strong. The victim’s situation is highly critical, as the internal harness can not work properly.

## MAINTENANCE

After each use, wash the stretcher with cold water. Use a brush in case of mud or soil. Leave it drying in a cool and ventilated place. Do not leave it in the sun light for long! Check the general wear, in particular on all the fastening points (long pulling points, short pulling points, TRIMM belt points, Y Z X points). With a 4-mm Allen wrench, check that all the screws fastening the flat board to the fabric are well tightened, **WITHOUT FORCING!** Tighten only if the screws are loosened.

Store the stretcher and the related supporting belts in the special sheath, in a dry and cool place.